Approach to Headache

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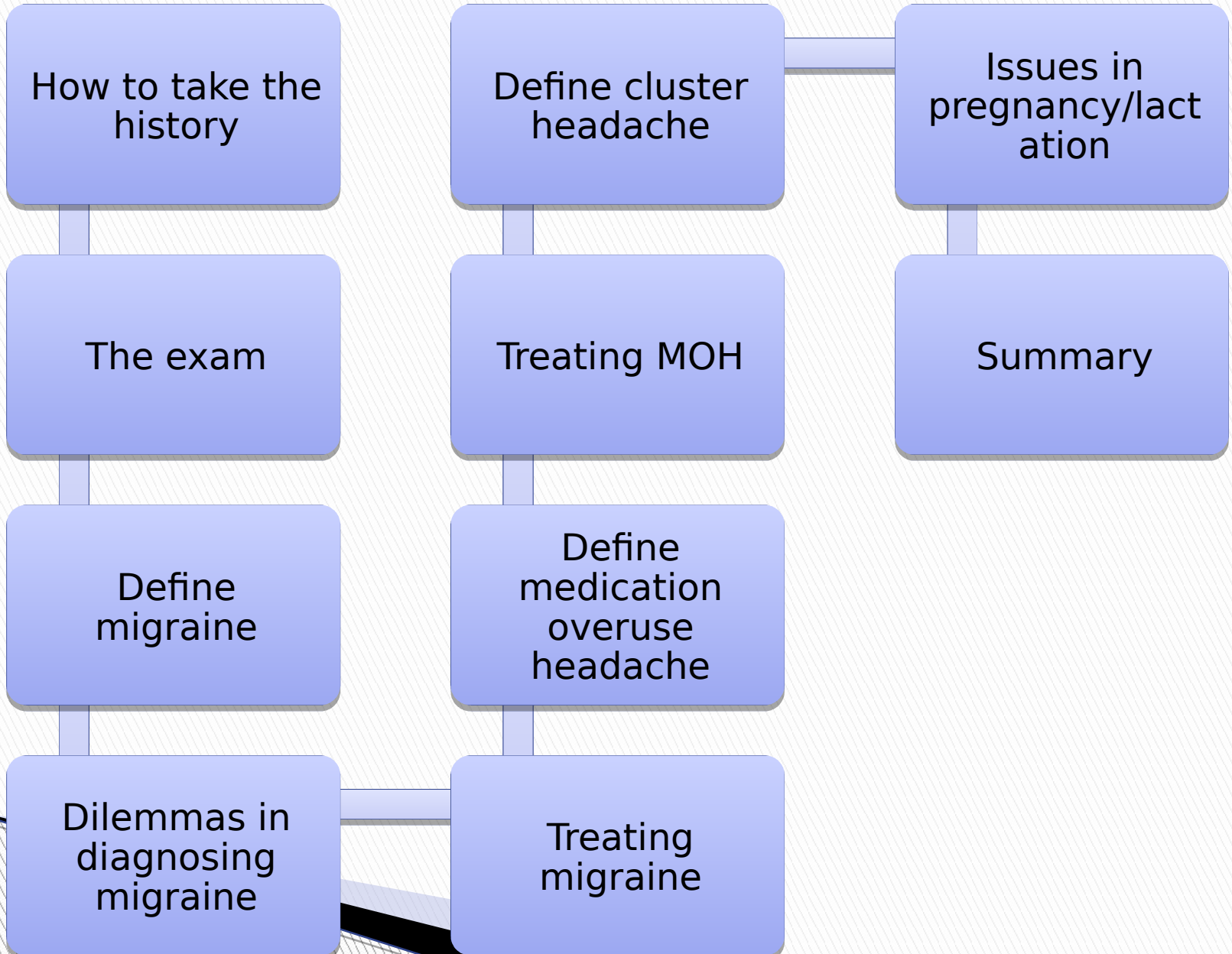
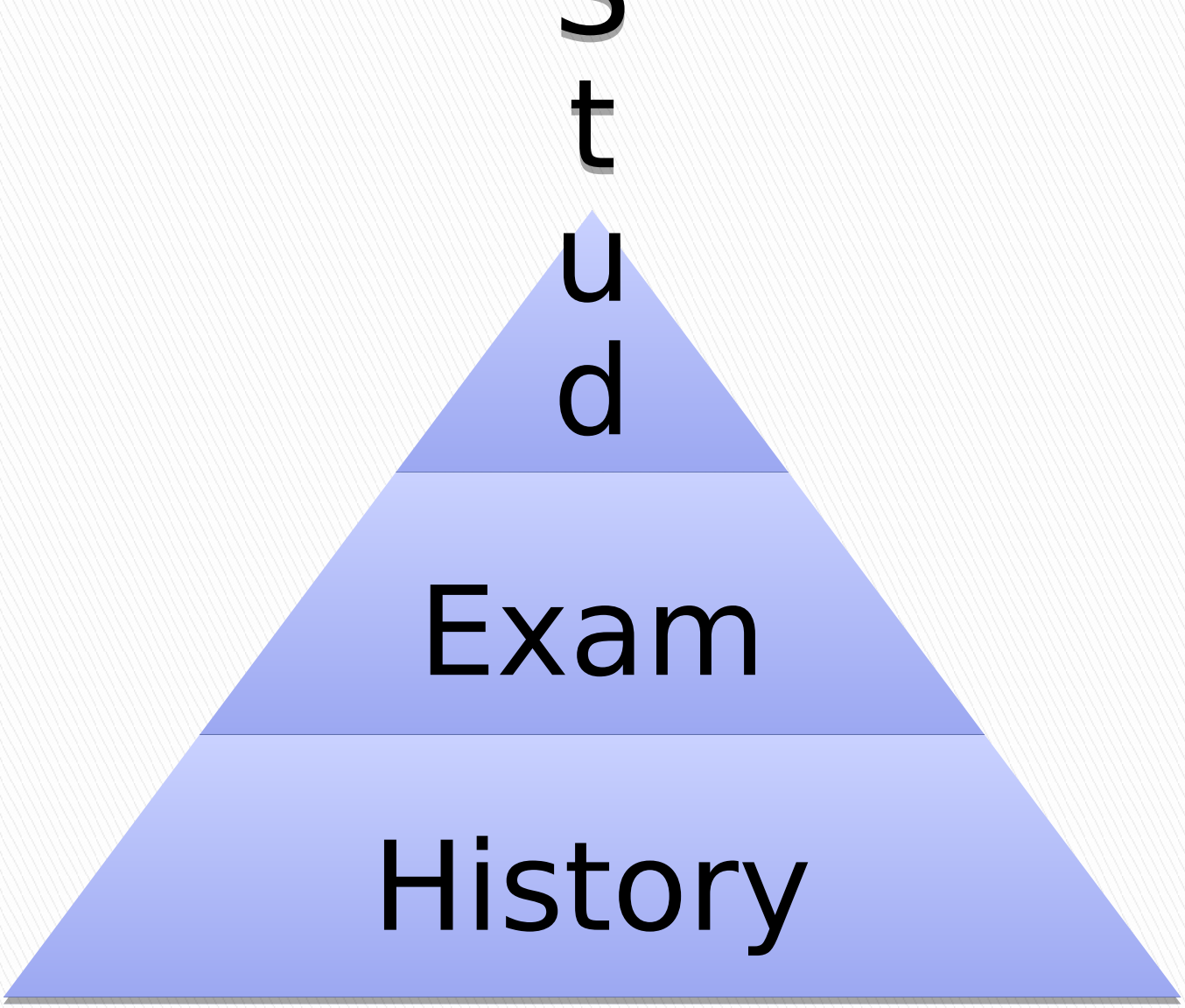
A 34-year-old woman came to the office complaining of severe, left-sided throbbing headaches that last about 12–24 hours. She has had these headaches once a week for several months. During an episode, she is sensitive to both bright lights and loud sounds and feels nauseous. Sleep seemed to help her headaches. Neurological examination was normal.

Objectives

- Respect the history
- Make a diagnosis
- Know when to order more
- Be confident when treating
- Know when to refer

Overview


How to take the history
Define cluster headache
Issues in pregnancy/lactation
The exam
Treating MOH
Summary
Define migraine
Define medication overuse headache
Dilemmas in diagnosing migraine
Treating migraine


Stud
Exam
History

Green Flags

- Stable pattern for >6 months
- Long-standing HA history
- Family history of similar HA
- Normal exam
- Consistently triggered by hormonal cycle, specific sensory input, weather
- HA meets criteria
- HA changes sides

Red Flags

- New headache, Severe headache
- Onset age >50 years
- Presence of fever or systemic symptoms
- Focal neurologic symptoms or signs
- Precipitated by positional changes, Valsalva, bending or coughing
- History of cancer, immunocompromise, or HIV
- Headache during pregnancy or postpartum
- Progressive headache or escalating medication requirements

A 26-year-old woman came to the office complaining of a 3-month history of dull, constant headaches that involved the entire cranium. These headaches were made worse by lying down and coughing. Over the last 2 weeks, she had noticed some blurred vision and diplopia on looking to the left. Neurological examination revealed bilateral papilledema and a partial left CN VI palsy.

Neurologic Exam for Headache

- Appearance and alertness
- Signs of meningeal irritation
- Signs of papilledema
- Ensuring that the cranial nerves are normal
- Evaluation of strength, sensory modalities, reflex and coordination.

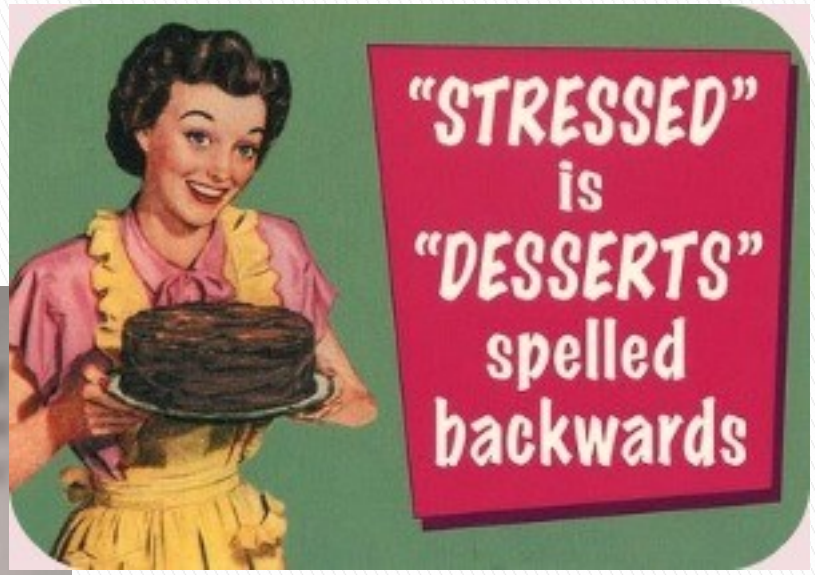
Migraine without Aura

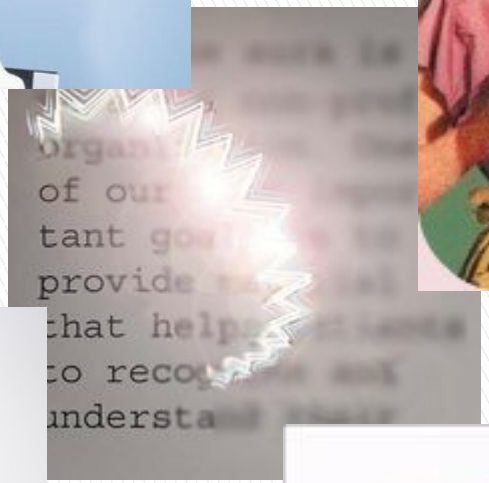
- At least 5 attacks fulfilling below items
- Pain lasts 4-72 untreated
- ≥2 of the following:
  - Unilateral
  - Pulsating
  - Moderate-severe pain
  - Aggravated by or causing avoidance of physical activity
- ≥1 during the headache
  - Nausea ± vomiting
  - Photophobia ± phonophobia

Migraine with aura

- At least two attacks fulfilling criterion below
- At least three of the following four characteristics are present:
  - fully *reversible* aura symptoms occur
  - *develops gradually* over more than 4 minutes
  - Lasts less *than 60 minutes*.
  - *Headache follows aura* with a free interval of less than 60 minutes

Symptoms before the headache





Dilemmas in Diagnosing Migraine

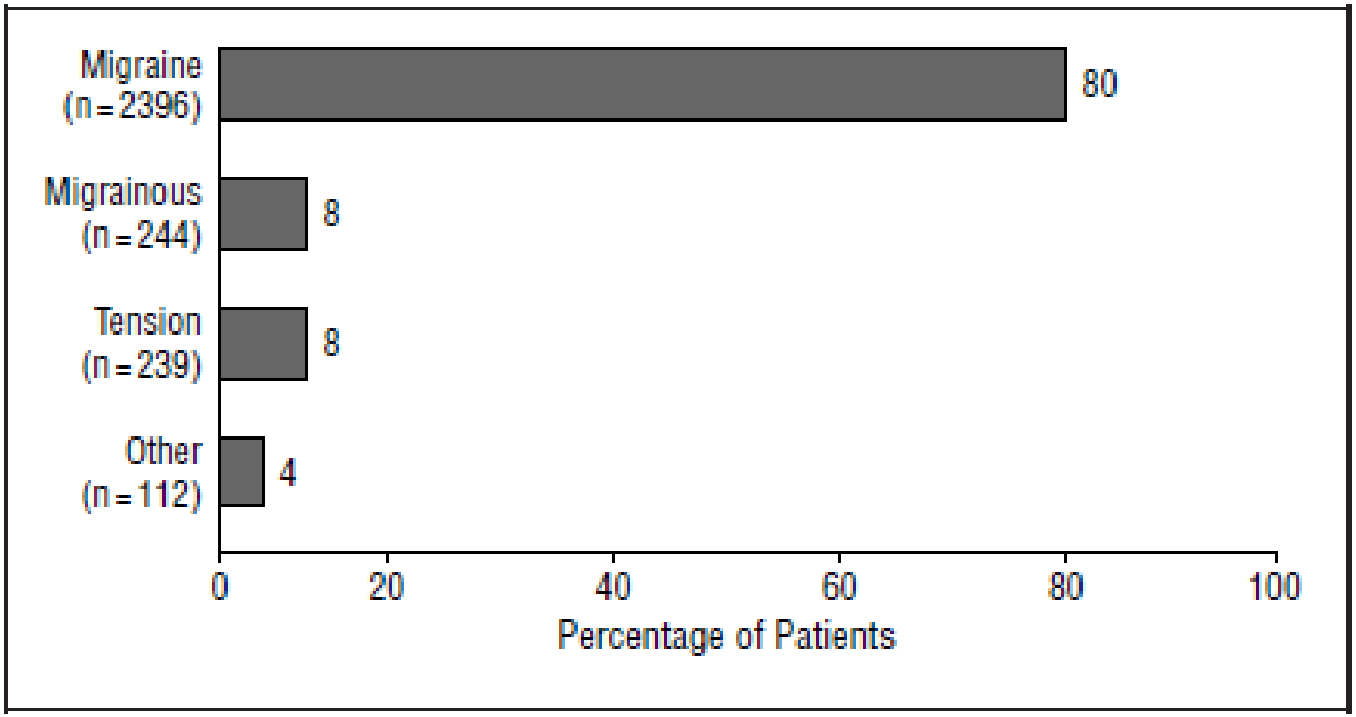
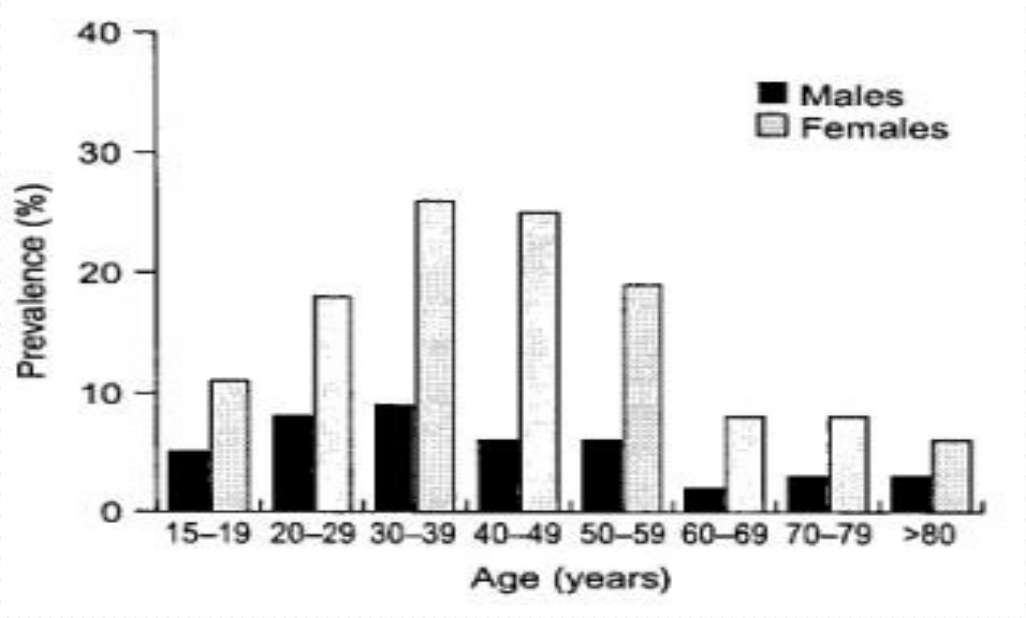


Figure 1. Physician diagnoses of 2991 patients with "sinus" headache according to self-description or previous physician diagnosis.

Schreiber, et al. Arch Intern Med. 2004

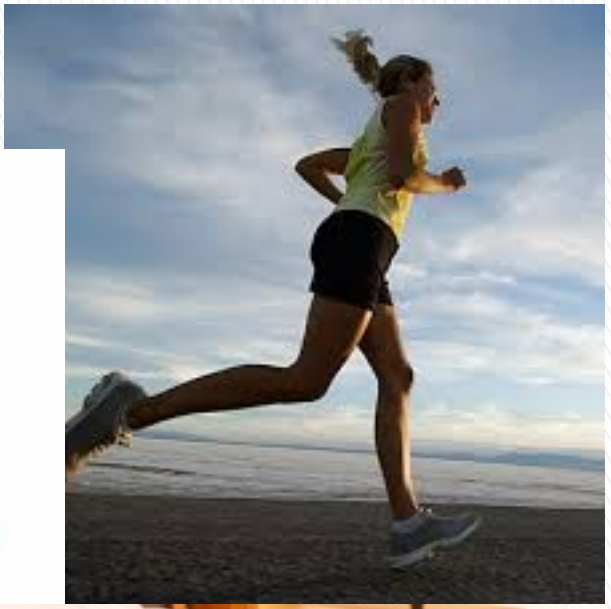
Migraine prevalence



A 51-year-old woman complained of several episodes of severe, paroxysmal stabbing pains that affected her right forehead and cheek regions for 3 months. These episodes lasted about 10–30 seconds and were triggered by chewing, washing her face, or brushing her teeth. Her last episode was about 2 days ago. Neurological examination in the clinic was normal.

Migraine Treatment

- Prevention



Migraine Treatment

- Lifestyle changes
- Abortive
  - No more than 2 times per week!!!!

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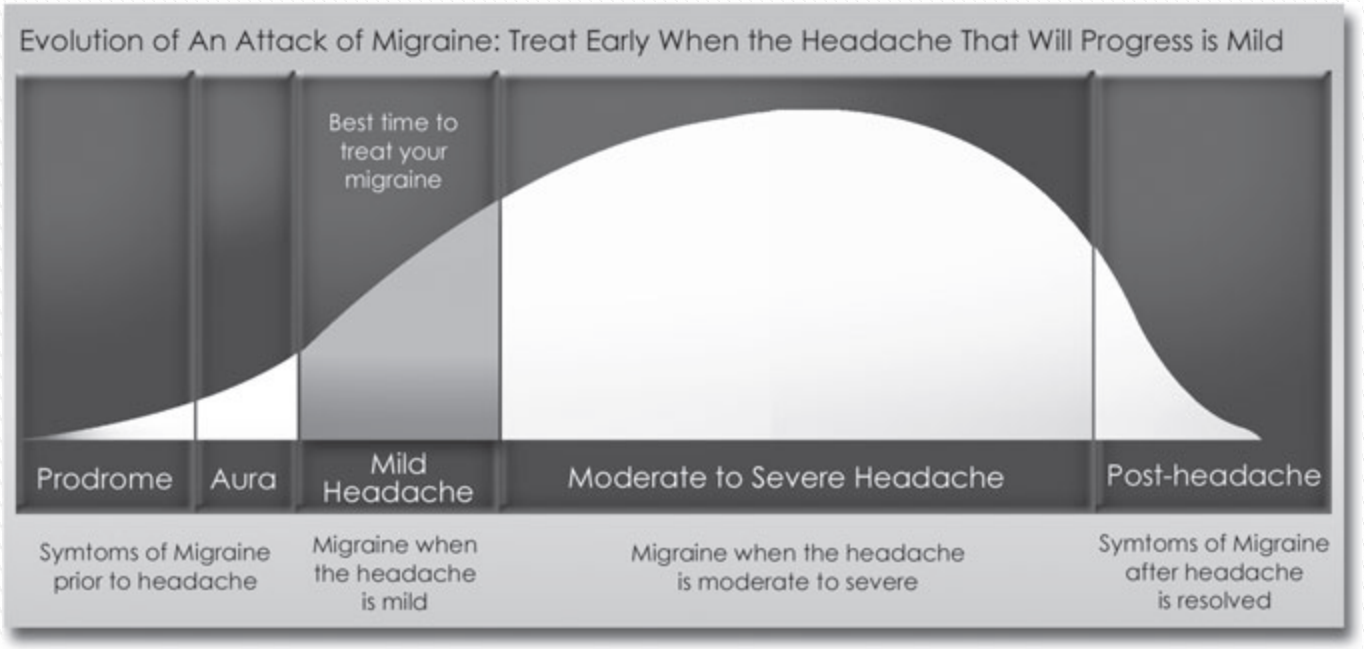
Preventive Rx

- **Class A Evidence**
  - Propranolol 80-240mg daily is target dose
  - Topiramate 25-150mg daily
  - Butterbur
- **Class B Evidence**
  - Amitriptyline 25-150mg daily
  - Venlafaxine 37.5-150mg daily
  - Magnesium sulfate 400mg daily
  - Riboflavin
  - Feverfew
- A special case
  - Onabotulinum toxin

Treat migraine early


Evolution of An Attack of Migraine: Treat Early When the Headache That Will Progress is Mild
Best time to treat your migraine
Prodrome
Aura
Mild Headache
Moderate to Severe Headache
Post-headache
Symtoms of Migraine prior to headache
Migraine when the headache is mild
Migraine when the headache is moderate to severe
Symtoms of Migraine after headache is resolved

Serotonin Syndrome

- May develop when triptans are used with selective serotonin or serotonin/norepinephrine reuptake inhibitors (remember tramadol also)
  - Agitation
  - Abnormal eye movements
  - Fever
  - Hyperreflexia
  - Muscle clonus
  - Tachycardia
  - Alterations in blood pressure

What to AVOID

- OPIOIDS
- FIORICET
- Too many NSAIDs

What goes wrong with prevention tx?

Parenteral Rx for intractable H/A

- Dihydroergotamine (DHE) 0.25 – 1mg
- Diphenhydramine 25-50mg
- Prochlorperazine (Compazine) 5 – 10mg IV slow
- Metoclopramide 10-20mg IV
- Ketorolac 10mg IV or 30mg IM
- Mg SO4 1gm IV
- Steroids-dexamethasone 10mg IV
- Sumatriptan 6mg SC

- Opioids are not a proper treatment for migraine

Medication Overuse Headache

- Doesn’t take much to transform to MOH
  - Fioricet 5 days/month
  - Opioids 8 days/month
  - Triptans 10 days/month
  - NSAIDs 10-15 days/month

MOH Treatment Steps

- 100% wean off overused medications over 4 weeks
  - ****Extreme caution when weaning patients off benzos, barbiturates, or opioids. May need to be done as inpatient!!

A 41-year-old man came to the ER complaining of severe, pounding right periorbital headaches associated with nasal congestion and rhinorrhea lasting about 45–60 minutes. He had experienced his third episode that night and was unable to fall asleep. He had a similar episode 6 months ago. On examination, temperature was 37.4°C, HR was 96 per minute, BP was 135/85 mmHg, and RR was 16 per minute. He was restless with normal cognition. Neurological examination revealed right conjunctival injection, miosis, and eyelid ptosis.

Cluster Headache (trigeminal-autonomic cephalgias)

- Intense unilateral pain
- Shorter than migraine
- Autonomic symptoms

Pregnancy Issues

- Natural history of migraine in pregnancy
- Risk vs benefit

Summary

- History, history, history
- Green and red flags
- Treatment strategies

What if *WE* tried all that…

- Refer to Neurology
- Call our duty cell for questions
  - 619-886-7741
- Email me
  - sarah.d.hodges3.mil@mail.mil

- We are here to help!